

Amendments to the Claims:

Listing of Claims

1. (CURRENTLY AMENDED) An actuation system for assisting the operation of the natural heart, the actuation system comprising:

a framework for interfacing with a natural heart;

an actuator system coupled to the framework and configured to engage an exterior surface of the heart, the actuator system comprising:

an actuator band extending along a portion of a heart wall exterior surface, the actuator band selectively movable between an actuated state and a relaxed state and operable, when in the actuated state, to assume a predetermined shape and thereby indent a portion of the heart wall to effect a reduction in the volume of the heart; and

a plurality of curvature limiting devices coupled to the actuator band and operable for limiting the curvature that the actuator band imposes on the indented portion of the heart wall.
2. (CURRENTLY AMENDED) The ~~activation~~ actuation system of claim 1, further comprising a drive apparatus coupled to the actuator band and operable for selectively moving the actuator band between the relaxed and actuated states to achieve the desired assistance of the natural heart.

3. (CURRENTLY AMENDED) The actuation system of claim 1, wherein the actuator band is configured to extend along a portion of the left ventricle heart wall, and the band, in the actuated state ~~indenting~~ is configured to indent the wall and ~~effecting~~ effect a reduction of the volume of the left ventricle.

4. (ORIGINAL) The actuation system of claim 1, wherein said actuator band includes a plurality of juxtaposed elements, the elements configured to be drawn together in the actuated state and to cooperate with each other, when drawn together, to assume the predetermined shape.

5. (CURRENTLY AMENDED) The actuation system of claim 4, wherein said elements are blocks coupled together by a cord, the cord operably coupled to be moved ~~by the drive apparatus~~ in the actuated state to draw the blocks together and form said predetermined shape.

6. (ORIGINAL) The actuation system of claim 5, wherein said blocks have adjacent cooperating surfaces which are at least partially coextensive when the blocks are drawn together.

7. (CURRENTLY AMENDED) The actuation system of claim 1, wherein at least one end of the actuator band is ~~fixed~~ coupled to the ~~external~~ framework element.

8. (CURRENTLY AMENDED) The actuation system of claim 1 wherein said actuator band is coupled at ~~an~~ both ends to said ~~external framework element~~.

9. (ORIGINAL) The actuation system of claim 5 further comprising a plurality of cords coupling the blocks together.

10. (CURRENTLY AMENDED) The actuation system of claim 5 wherein the cord extends through one of an aperture and a channel formed in the blocks to couple[[d]] the blocks together.

11. (CURRENTLY AMENDED) The actuation system of claim 1 wherein the curvature limiting device includes a curvature limiting band coupled between the actuator band and the ~~external framework element~~.

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13. (ORIGINAL) The actuation system of claim 1 wherein said curvature limiting device is operable for limiting the curvature of the actuator band to a certain percentage of the natural curve of the portion of a heart wall exterior surface along which the actuator band extends.

14. (CURRENTLY AMENDED) The actuation system of claim 1 further comprising a plurality of actuator bands for indenting a portion of the heart wall.

15. (ORIGINAL) The actuation system of claim 1 wherein said actuator band comprises a plurality of articulated elements which move with respect to each other at joints.

16. (ORIGINAL) The actuation system of claim 1 wherein the actuator band, in the relaxed state, is operable to generally assume the natural curve of the heart wall surface along which the actuator band extends.

17. (CURRENTLY AMENDED) An actuation system for assisting the operation of the natural heart, the actuation system comprising:

a framework for interfacing with a natural heart;

an actuator system coupled to the framework and configured to engage an exterior surface of the heart, the actuator system comprising:

an actuator band extending along a portion of a heart wall exterior surface, the actuator band selectively movable between an actuated state and a relaxed state and operable, when in the actuated state, to assume a predetermined shape and thereby indent a portion of the heart wall to effect a reduction in the volume of the heart;

a plurality of curvature limiting devices coupled to the actuator band and

operable for limiting the curvature that the actuator band imposes on the indented portion of the heart wall; and

a paving element ~~coupled~~ positioned between the actuator band and the heart wall for providing smooth functioning of the band with the heart wall.

18. (CURRENTLY AMENDED) The actuation system of claim ~~[[1]]~~ 17 wherein the paving element is flexible.

19. (CURRENTLY AMENDED) The actuation system of claim 17 wherein the paving element includes a mesh.

20. (CURRENTLY AMENDED) The actuation system of claim 17 wherein the paving element includes a fabric.